



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------|----------------------------------|----------------------|-----------------------|------------------|--|
| 10/742,934 | 12/23/2003 | Jae-Hee Moon | 1793.1128 | 7379 | |
| 21171 STAAS & HA | 7590 06/08/2007 LSEY LLP | | EXAM | EXAMINER | |
| SUITE 700 | | | HALEY, JOSEPH R | | |
| WASHINGTO | ORK AVENUE, N.W. ON, DC 20005 | | ART UNIT PAPER NUMBER | | |
| | • | | 2627 | | |
| | | | | • | |
| | | | MAIL DATE | DELIVERY MODE | |
| | | | 06/08/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | | | |
|---|--|---|---|--------|--|--|--|
| Office Action Summary | | 10/742,934 | MOON ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | Joseph Haley | 2627 | | | | |
| | The MAILING DATE of this communication app | ears on the cover s | heet with the correspondence address | | | | |
| Period for Reply | | | | | | | |
| WHIC - Exter after - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE asions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COM 36(a). In no event, however vill apply and will expire SIX cause the application to be | MUNICATION. r, may a reply be timely filed (6) MONTHS from the mailing date of this communic ecome ABANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1)🛛 | Responsive to communication(s) filed on 12 Ma | arch 2007. | | | | | |
| 2a)⊠ | This action is FINAL . 2b) This action is non-final. | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | on of Claims | | | | | | |
| 4)⊠ | Claim(s) <u>1-12</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ | Claim(s) <u>1-12</u> is/are rejected. | | | | | | |
| | Claim(s) is/are objected to. | | | | | | |
| 8)[| Claim(s) are subject to restriction and/or | r election requireme | ent. | , | | | |
| Applicati | on Papers | | | | | | |
| 9)[| The specification is objected to by the Examine | r. | | | | | |
| | The drawing(s) filed on is/are: a) ☐ acce | | ted to by the Examiner. | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in | abeyance. See 37 CFR 1.85(a). | | | | |
| | Replacement drawing sheet(s) including the correcti | ion is required if the d | rawing(s) is objected to. See 37 CFR 1.12 | 21(d). | | | |
| 11) 🔲 | The oath or declaration is objected to by the Ex | aminer. Note the at | tached Office Action or form PTO-15 | 2. | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | |
| 12) 🔲 . | Acknowledgment is made of a claim for foreign | priority under 35 U | .S.C. § 119(a)-(d) or (f). | | | | |
| a)[| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | ee the attached detailed Office action for a list of | or the certified copi | es not received. | | | | |
| Attachmen | t(s) | | | | | | |
| | e of References Cited (PTO-892) | | erview Summary (PTO-413) | | | | |
| | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) | | per No(s)/Mail Date tice of Informal Patent Application | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | | |

Application/Control Number: 10/742,934

Art Unit: 2627

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 6, 8, 9, 10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto (US 7020058).

In regard to claim 1, 5 and 9, Yamamoto teaches an apparatus for preventing a writing error from occurring on an optical disc in an optical disc drive having a wobble signal generator, the apparatus comprising: an interpolation ATIP sync signal detector which receives a wobble signal from the wobble signal generator of the optical disc drive and detects an interpolation ATIP sync signal from the wobble signal, the interpolation ATIP sync is an ATIP sync signal which is artificially interpolated by the wobble signal generator a number determiner which determines a number of interpolation ATIP sync signals and generates a writing speed transformation control signal based on the number of interpolation ATIP sync signals determined; and a writing speed adjuster which receives the writing speed transformation control signal from the number determiner and adjusts a writing speed of the optical disc drive to a speed of an optical disc on which writing is to be performed (see column 3 lines 34-43).

In regard to claims 2, 6 and 10, Yamamoto teaches wherein the number determiner determines whether a predetermined number of interpolation ATIP sync signals are consecutively detected within a predetermined period of time (column 3 lines 41-43. Yamamoto only changes speed when the number of ATIP syncs changes).

In regard to claims 4, 8 and 12 Yamamoto teaches wherein the writing speed adjuster adjusts the writing speed by monitoring a plurality of control signals in real time (column 3 lines 37-40. Yamamoto teaches monitoring the wobble signal and then determining the ATIP signal from that. The ATIP signal and wobble signal are two different signals).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto in view of Harada (US 6856583).

In regard to claims 3, 7 and 11, Yamamoto teaches all of the elements of these claims except the writing speed adjuster applies a writing stop control signal to an optical disc drive controller so that the optical disc drive enters a pause mode, adjusts the writing speed to a speed of the optical disc, and applies a writing speed adjustment control signal to the optical disc drive to adjust the writing speed.

Harada teaches the writing speed adjuster applies a writing stop control signal to an optical disc drive controller so that the optical disc drive enters a pause mode, adjusts the writing speed to a speed of the optical disc, and applies a writing speed adjustment control signal to the optical disc drive to adjust the writing speed (column 7 lines 53-58).

The two are analogous art because they both deal with the same field of invention of recording speed of an optical disc.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the apparatus of Yamamoto with the pause mode of Harada. The rationale is as follows: At the time of invention it would have been obvious to provide the apparatus of Yamamoto with the pause mode of Harada because it would ensure data was written at the correct speed.

Response to Arguments

Applicant's arguments filed 3/12/07 have been fully considered but they are not persuasive. Applicant argues on page 5, paragraph 5, "Various embodiments of the present invention, discuss "detecting an interpolation ATIP sync signal from the wobble signal" as recited in amended claim 1, for example. The interpolation ATIP sync signal refers to an ATIP sync signal which is artificially interpolated by the wobble signal generator when the wobble signal generator does not normally generate an ATIP sync signal due to the characteristics of the optical disc, variations in the characteristics of an optical pickup and external factors. Thus, resulting in writing errors. When the interpolation ATIP sync signal is indefinitely applied, writing to the optical disc may

Art Unit: 2627

continue. However, the ATIP sync signal may be distorted and an error may occur when reading written data (see paragraphs [0021] and [0022] of the specification of the present invention). Yamamoto fails to discuss these features". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., The interpolation ATIP sync signal refers to an ATIP sync signal which is artificially interpolated by the wobble signal generator when the wobble signal generator does not normally generate an ATIP sync signal due to the characteristics of the optical disc, variations in the characteristics of an optical pickup and external factors) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also argues on page 5, paragraph 4, that Yamamoto fails to teach "detects an interpolation ATIP sync signal from the wobble signal, the interpolation ATIP sync is an ATIP sync signal which is artificially interpolated by the wobble signal generator". However if applicant looks at fig. 1 element 7 it is quite clear that Yamamoto teaches decoding an ATIP signal from a wobble signal.

Applicant also argues on page 5, paragraph 4, that Yamamoto fails to teach "a writing speed adjuster which receives the writing speed transformation control signal from the number determiner and adjusts a writing speed of the optical disc drive to a speed of an optical disc on which writing is to be performed" However, if applicant looks at column 3 lines 34-43 and fig. 3 elements S2 and S3, Yamamoto teaches calculating

recording velocity by counting ATIP syncs. When Yamamoto calculates the recording velocity, it is the same as adjusting the recording velocity.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Haley whose telephone number is 571-272-0574. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/742,934

Art Unit: 2627

Page 7

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

Information regarding the status of an application may be obtained from the

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jrh

SUPERVISORY PATENT EXAMINER

William Korzuel

TECHNOLOGY CENTER 2600